Caltrans

Construction Storm Water Pollution Prevention Bulletin

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The Storm Water Pollution Prevention Bulletin is prepared by the Storm Water Compliance Review Task Force to aid all projects and operations in maintaining compliance with the National Pollutant Discharge Elimination System (NPDES) permit requirements.

Continuing Construction Concerns: Asphalt Concrete Stockpiles, and Cold Mix Use

Incomplete AC cold mix stockpile protection. Note missing plastic cover and broken sandbags with gaps.

Non-storm water pollution discharge violations continue to be common at construction sites. While previous bulletins have addressed these issues, this bulletin will serve to update, inform and remind.

Non-Storm Water Pollution

According to the Environmental Protection Agency, runoff from urban areas is the largest cause of water quality impairment to estuaries (coastal areas where seawater and fresh water mix) and the third largest to lakes. Non-storm water generated pollutants are more toxic than sediment and nutrients.

Asphalt Concrete (AC) Stockpiles (CD10)

A non-storm water pollution source of concern is onsite storage of fresh asphalt concrete (AC) products, such as cold mix, and storage of AC grindings and residuals.

Cold mix, or other fresh AC products stored onsite, must be covered during the winter season to prevent leachable hydrocarbons, from coming into contact with storm water runon and runoff. The typical practice of placing containment berms around cold mix stockpiles requires removal of the contaminated storm water as a hazardous waste.

AC grindings and wastes from existing pavement have typically leached out most hydrocarbons but are still a source of pollution from motor oils, antifreezes and small particles that can be transported off in runoff. It is therefore usually sufficient to place a berm or silt fence around the storage area to contain the runoff generated from the pile, and to allow settlement. However, if an oily sheen appears on the runoff leaving the contained area, then the stockpile must be covered or removed.

Cold Mix Usage

AC cold mix is sometimes used to form temporary drainage structures or make temporary measures "watertight". This practice is unacceptable due to the high hydrocarbon content of cold mix. Because cold mix is "cut-back" with diesel fuel to make it pliable when cold, it releases hydrocarbons on contact with runoff. Furthermore, cold mix breaks up easily and particles are carried downstream in storm runoff.

Unacceptable use of AC cold mix for temporary drainage structure.

To achieve the same goal, the use of sandbags is recommended, or as an alternative, compacted hot mix AC can be placed. Once hot mix AC is compacted and cures, it is a stable material and lasts longer than sandbags.

Additional information is available in the Caltrans Storm Water Quality Handbooks. Questions or comments may be directed to:

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